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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,968	12/10/2003	Tony Walter	CALIP001D1/P041D	9307
22434	7590	12/13/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 778 BERKELEY, CA 94704-0778				CONNELLY CUSHWA, MICHELLE R
ART UNIT		PAPER NUMBER		
				2874

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/732,968	WALTER ET AL.
	<b>Examiner</b> Michelle R. Connelly-Cushwa	<b>Art Unit</b> 2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4,8 and 30-39 is/are pending in the application.  
 4a) Of the above claim(s) 32-39 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-4,8,30 and 31 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) 1-4,8 and 30-39 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 10 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1203</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4, 8, 30 and 31, drawn to a method for equalizing optical signal power, classified in class 385, subclass 140.
- II. Claims 32-39, drawn to a fiber optic switching device, classified in class 385, subclass 18.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process can be practiced with another materially different product and the product as claimed can be used in a different process.

Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

During a telephone conversation with Francis T. Kalinski, II on December 8, 2004 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-4, 8, 30 and 31. Affirmation of this election must be made by applicant in replying to this Office action. Claims 32-39 have been withdrawn from further

consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention..

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Information Disclosure Statement***

The prior art documents submitted by applicant in the Information Disclosure Statement filed on December 10, 2003 have all been considered and made of record (note the attached copy of form PTO-1449).

***Claim Objections***

Claims 4 and 30 are objected to because of the following informalities:

Regarding claim 4; the claim does not conclude with a period.

Regarding claim 30; the claim recites the limitation "measuring output the optical power" in line 5 of the claim. This limitation should read --measuring the optical power--.

Appropriate correction is required.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claims 1-4, 8, 30 and 31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of U.S. Patent No. 6,697,547 B2.** Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-26 of U.S. Patent No. 6,697,547 B2 at least disclose or suggest all of the limitations of claims 1-4, 8, 30 and 31 of the present Application.

The Examiner notes that claims 1-4, 8, 30 and 31 of the present Application were not filed as a result of a restriction requirement in the parent case, and that these claims are drawn to the same invention that was examined in the parent application, resulting in U.S. Patent No. 6,697,547 B2.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-3, 8, 30 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Sparks et al. (US 6,625,340 B1).**

Regarding claims 1, 2, 8, 30 and 31; Sparks et al. discloses a method for equalizing optical signal power in a group of optical signals (see column 2, lines 33-36) in an optical transmission system (telecommunications network; see Figure 4), the method comprising:

- inputting a group/plurality of optical signals into an optical switch (switching means, 120);
- measuring the optical power of the plurality of optical signal after they are passed through the optical switch (see the power measuring means in Figure 4);
- selecting a group of optical signals from among the plurality of optical signals in the optical switch;
- user selecting an optical power margin (see column 2, lines 33-48);
- defining/determining a user selected power range (predetermined output power; any desired output power / power range can be selected by the user; see column 2, lines 20-51);
- switching at least one of the plurality of optical signals to a desired output port using the switching apparatus; and
- attenuating selected optical signals in the group of optical signals such that the signal power of each optical signal in the group of optical

signals falls within the user selected power range (see column 2, lines 20-51) and such that a more uniform power distribution is achieved among the group of optical signals;

- wherein defining a user selected power range includes:
  - o monitoring the optical power of the group of optical signals (power measuring means; see Figure 4 and column 2, lines 44-65);
  - o determining the optical power of the weakest signal in the group of optical signals, thereby defining a baseline optical power [Sparks et al. discloses that the measurement step comprises determining the relative ratios between the optical powers of the optical signals that are being attenuated and that the signals are attenuated to achieve a predetermined ratio of one, which is necessary to equalize the outputs (see column 3, lines 10-11, and claims 3 and 5 of Sparks et al.). This inherently includes determining the optical power of the weakest signal in the group and, since the switching device employed by Sparks et al. (see Figure 1) to attenuate the optical signals does not increase the power of the signals, it must inherently use the optical power of the weakest signal in the group as a baseline optical power level if the optical power of all of the signals is to be equalized (see column 3, lines 10-11)];

- implementing a user selected power margin in combination with the baseline optical power level to define the user selected power range [the user selects a desired power level in the method disclosed by Sparks et al. that for the case of equalization can not be more than the power of the weakest signal, and the user selected power range is defined by the user selected power margin in combination with the baseline optical power level to determine how to attenuate each signal]; and
- wherein attenuating selected optical signals in the group of optical signals comprises attenuating the optical signals that fall outside of the user selected power range such that the signal power of each optical signal in the group of optical signals falls within the user selected power range.

Regarding claim 3; Sparks et al. discloses that any desired output power can be selected to achieve the desired effect (see column 2, lines 20-51); therefore, the user selected power margin is freely adjustable by a system user.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sparks et al. (US 6,625,340 B1).**

Regarding claim 4; Sparks et al. discloses all of the limitations of claim 4 as applied above, except for specification stating that a user selected power is about 1 dBm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the user selected power be about 1 dBm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (*In re Aller*, 105 USPQ 233) and that discovering an optimum value of a result effective variable involves only routine skill in the art (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), and since Sparks et al. teaches the power selected by the user can be any desired value.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Ford et al. (US 5,900,983) discloses a level-setting optical attenuator including a variable optical attenuator, an optical power detector and control electronics to attenuate a signal so that it has a predetermined power level (see the abstract and Figures).

Any inquiry concerning the merits of this communication should be directed to Examiner Michelle R. Connelly-Cushwa at telephone number (571) 272-2345. The examiner can normally be reached 9:00 AM to 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B. Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general or clerical nature should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562.

*Michelle R. Connelly-Cushwa*  
Michelle R. Connelly-Cushwa  
Patent Examiner  
December 9, 2004